

THE PENDING CLAIMS:

1. (Previously Presented) A semiconductor production apparatus including a process chamber; a wafer support disposed within said process chamber for supporting a semiconductor wafer; and a heating source for heat treatment of the semiconductor wafer supported by said wafer support;

wherein said wafer support comprises a susceptor having an upper surface for mounting said semiconductor wafer thereon, and a susceptor support shaft for supporting said susceptor from thereunder;

wherein said susceptor support shaft has a main shaft positioned substantially coaxial with a center of said susceptor, and at least three arms radially extending from an upper end of said main shaft, each said arm having a distal end provided with a protrusion directed toward said susceptor;

wherein a peripheral portion of a lower surface of said susceptor is formed with depressions, each said depression having an elongated form extending in a radial direction of said susceptor, each said depression having a width substantially identical to an outside diameter of said protrusion, adapted to engage said protrusion;

wherein a portion of each of said depressions extends along a direction substantially parallel to a plane defined by at least one of said upper surface of said susceptor or said lower surface of said susceptor so as to permit movement of said susceptor in a substantially radial direction relative to said protrusions along said depressions; and

wherein each of said depressions has a closed end on an outer peripheral side thereof, said protrusions being configured to engage said closed end of said depressions at ambient temperature.

2. (Original) A semiconductor production apparatus according to claim 1, wherein said heating source is disposed under said susceptor.

3. (Previously Presented) A semiconductor production apparatus according to claim 1, wherein said depressions have an elongated form extending in a radial direction of said susceptor.
4. (Canceled)
5. (Previously Presented) A semiconductor production apparatus according to claim 1, wherein said susceptor comprises graphite.
6. (Previously Presented) A semiconductor production apparatus according to claim 1, wherein said susceptor comprises graphite having a surface coated with silicon carbide.
7. (Original) A semiconductor production apparatus according to claim 1, wherein said susceptor comprises silicon carbide.
8. (Original) A semiconductor production apparatus according to claim 1, wherein said susceptor support shaft comprises silica glass.
9. (Original) A semiconductor production apparatus according to claim 1, wherein said process chamber comprises an inlet for a process gas, and an outlet for letting out the gas from said process chamber.
10. (Original) A semiconductor production apparatus according to claim 9, wherein said process gas is a gas for carrying out an epitaxial growth process.
11. (Previously Presented) A semiconductor production apparatus according to claim 1, wherein said arms incline upward as said arms extends radially outward.

12. (Previously Presented) A semiconductor production apparatus according to claim 1, wherein said depressions are disposed at equally spaced intervals in a circumferential direction of said susceptor.

13. (Canceled)